

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
9 October 2003 (09.10.2003)

PCT

(10) International Publication Number  
**WO 03/083482 A1**(51) International Patent Classification<sup>7</sup>: **G01N 33/68,**  
C12Q 1/68**Johannes** [DE/DE]; Quittenweg 11, 22175 Hamburg  
(DE).

(21) International Application Number: PCT/EP03/03364

(74) Agents: **MEYERS, Hans-Wilhelm** et al.; Postfach 10 22  
41, 50462 Köln (DE).

(22) International Filing Date: 1 April 2003 (01.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: *02 Oct 04*  
02007522.2 2 April 2002 (02.04.2002) EP  
60/368,970 2 April 2002 (02.04.2002) US(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,  
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,  
UZ, VC, VN, YU, ZA, ZM, ZW.(71) Applicant (*for all designated States except US*): **EVOTEC**  
**NEUROSCIENCES GMBH** [DE/DE]; Schnackenburg-  
allee 114, 22525 Hamburg (DE).(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

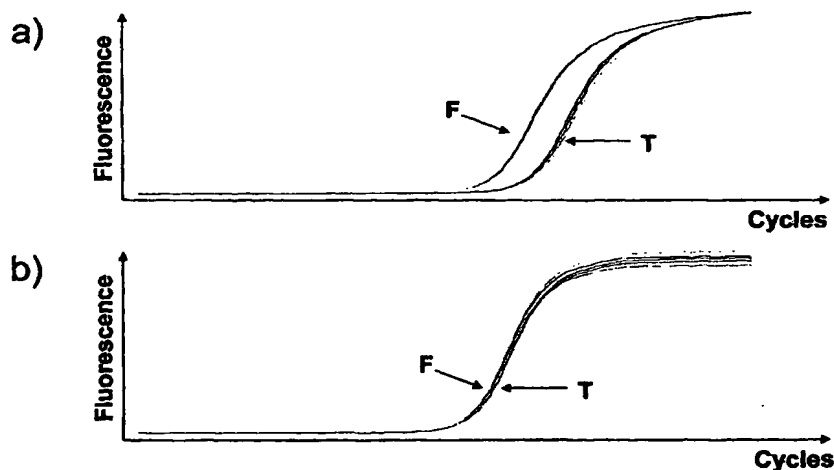
(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **HIPFLER, Rainer**  
[DE/DE]; Albert-Fränkell-Str. 6, 69126 Heidelberg (DE).  
**HANES, Jozef** [SK/DE]; Dornkamp 15, 22869 Sch-  
enefeld (DE). **VON DER KAMMER, Heinz** [DE/DE];  
Verbindungsstr. 6d, 22607 Hamburg (DE). **POHLNER,**

Published:

— with international search report

[Continued on next page]

(54) Title: CAMP-REGULATED PHOSPHOPROTEIN FOR DIAGNOSTIC AND THERAPEUTIC USE IN NEURODEGENER-  
ATIVE DISEASES**Fig. 2: Verification of differential expression of  
human TARPP by quantitative RT-PCR**

(57) Abstract: The present invention discloses a novel nucleic acid molecule encoding hTARPP. Further, the present invention discloses the differential expression of hTARPP in specific brain regions of Alzheimer's disease patients. Based on this finding, this invention provides a method for diagnosing or prognosticating a neurodegenerative disease, in particular Alzheimer's disease, or for determining whether a subject is at increased risk of developing such a disease. Furthermore, this invention provides therapeutic and prophylactic methods for treating or preventing Alzheimer's disease and related neurodegenerative disorders using the gene coding for hTARPP. A method of screening for modulating agents of neurodegenerative diseases is also disclosed.